

## COHERENT LIGHT SOURCE AND OPTICAL SYSTEM

### ABSTRACT OF THE DISCLOSURE

In a coherent light source in which limitations on the wavelength of emitted light are relaxed, a coherent light source for simultaneously emitting a first light (3) and a second light (4) having a wavelength shorter than that of the first light (3), includes: a light source main body emitting at least the first light (3); a mirror (5) which transmits or reflects the first light (3); and a functional film (6) provided on at least a part of the mirror (5). The functional film (6) has a photocatalytic effect to be induced by the second light (4).